



FEMA

Partners Build Models: Enhance Communities

Full Mitigation Best Practice Story

Multiple Counties, Florida

Volusia County, FL -Imagine reading, writing, arithmetic, wood, dust, and hammers in the classroom. Picture a home model built to withstand 150 mph winds. Envision DeLand High School students building these model houses. Think of instructors teaching students how to build more secure homes. See communities learning how to rebuild stronger and safer because of the combined efforts of businesses and schools.



Administrators at area high schools eagerly volunteered their vocational students to build Mitigation House Models (formerly known as the Dawg Haus)- a stronger, safer, and complete house structure. The students are members of the DeLand High School chapter of Future Builders of America (FBA). The students earned credit points with monetary value towards college tuition, sponsored by the Volusia Home Builders Association. Their fourth Mitigation House Model is currently under construction.

"It comes real close to home here, real close to home," William Paige, DeLand's woodshop instructor said. "One of our students lost her home and everything. Everything we're doing here they can relate to. They can see what we're doing in here relates to what's happening out there."

The Federal Emergency Management Agency (FEMA) collaborated with central Florida building merchants, suppliers, and a vocational high school to donate materials and resources to build Mitigation House Models in the classrooms. Donors such as Grainger Industrial Supply, Home Depot, and Simpson Strong-Tie Company, Inc. had a common motivation for their contributions to the school. They all agreed that it is about helping the community stay safe and that they are glad to be a part of it.

"The company really focused towards the community. We are involved in the school district. When this opportunity came up [to contribute to Dawg Haus], it made perfect sense to help the kids," Bill O'Brien, branch manager of Grainger Industrial Supply Division said.

The models were built with 2" by 6" lumbers in lieu of 2" by 4", to withstand powerful wind uplift. They have metal hurricane ties that connect the roof, walls, and the foundation together, reinforcing the structure. The load is then transferred from the roof, to the wall, to the foundation. A house model structure was located at the Home Depot Store in Port Orange along with brochures and handouts for the public.

"We donated building materials for the models because we are concerned about community safety and ways to secure homes," said Luis Montalvo, assistant store manager at the Lady Lake Home Depot Store.

David Denoncour, assistant store manager of the Home Depot Store in Port Orange said the Mitigation House Model has been very educational for the "do-it-yourself" individuals out to buy homes. They can see how the model is built and can compare the construction of their own home with their contractors.

"We are glad we could help and put the products to a good cause and help people to learn," said Richard St. Louis, store manager at New Smyrna Home Depot. "It educates people on what they can do to reinforce their homes and save on future repair cost while better protecting their families."

Sharon Kircher, a territory manager for Simpson-Strong-Tie Company, Inc., said that her company often works with FEMA. Kircher said that she attended an awards event where the Building Official and Inspector Association recognized students at DeLand High School for their work and gave them code books. The students were very happy.

"Our objective is to educate as many people as we can so that we are all on the same page, knowing that there are products out there to help," Kircher said. "Even if a house has already been built, there are products people can use to retrofit their house."

Building stronger and safer houses utilizing the Mitigation House Model will protect communities and will ensure a safer future for families in the wake of severe weather events.

Activity/Project Location

Geographical Area: **Multiple Counties in a State**

FEMA Region: **Region IV**

State: **Florida**

County: **Lake County; Seminole County; Sumter County; Volusia County**

Key Activity/Project Information

Sector: **Public/Private Partnership**

Hazard Type: **Severe Storm; Tornado**

Activity/Project Type: **Education/Outreach/Public Awareness**

Activity/Project Start Date: **02/2007**

Activity/Project End Date: **Ongoing**

Funding Source: **Private funds**

Activity/Project Economic Analysis

Cost: **Amount Not Available**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**

Federal Disaster #: **1561 , 09/26/2004**

Federal Disaster Year: **2004**

Value Tested By Disaster? **Unknown**

Repetitive Loss Property? **No**

Reference URLs

Reference URL 1: **<http://www.floridadisaster.org>**

Reference URL 2: **<http://www.fema.gov>**

Main Points

- Administrators at area high schools eagerly volunteered their vocational students to build Mitigation House Models (formerly known as the Dawg Haus)- a stronger, safer, and complete house structure.
- The Federal Emergency Management Agency (FEMA) collaborated with central Florida building merchants, suppliers, and a vocational high school to donate materials and resources to build Mitigation House Models in the classrooms.
- Building stronger and safer houses utilizing the Mitigation House Model will protect communities and will ensure a safer future for families in the wake of severe weather events.



A Mitigation House Model



Students and teacher review the plans